

## Section 1. Registration Information

### Source Identification

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Facility Name:	23rd Avenue Wastewater Treatment Plant
Parent Company #1 Name:	City of Phoenix
Parent Company #2 Name:	

### Submission and Acceptance

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Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	
Receipt Date:	11-Jun-2009
Postmark Date:	11-Jun-2009
Next Due Date:	11-Jun-2014
Completeness Check Date:	11-Jun-2009
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

### Facility Identification

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EPA Facility Identifier:	1000 0003 3206
Other EPA Systems Facility ID:	AZD981667538

### Dun and Bradstreet Numbers (DUNS)

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Facility DUNS:	78984358
Parent Company #1 DUNS:	78984358
Parent Company #2 DUNS:	78984358

### Facility Location Address

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Street 1:	2470 S. 22nd Ave.
Street 2:	
City:	Phoenix
State:	ARIZONA
ZIP:	85009
ZIP4:	
County:	MARICOPA

### Facility Latitude and Longitude

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Latitude (decimal):	33.426667
Longitude (decimal):	-112.106389
Lat/Long Method:	Interpolation - Photo
Lat/Long Description:	Plant Entrance (General)
Horizontal Accuracy Measure:	25
Horizontal Reference Datum Name:	North American Datum of 1983
Source Map Scale Number:	24000

## Owner or Operator

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Operator Name:	Robert Hollander
Operator Phone:	(602) 262-4992

## Mailing Address

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Operator Street 1:	200 W. Washington, WSD, 9FL
Operator Street 2:	
Operator City:	Phoenix
Operator State:	ARIZONA
Operator ZIP:	85003
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

## Name and title of person or position responsible for Part 68 (RMP) Implementation

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RMP Name of Person:	Kevin Williams
RMP Title of Person or Position:	Water Facilities Supervisor
RMP E-mail Address:	kevin.williams@phoenix.gov

## Emergency Contact

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Emergency Contact Name:	Kevin Williams
Emergency Contact Title:	Water Facilities Supervisor
Emergency Contact Phone:	(602) 262-1858
Emergency Contact 24-Hour Phone:	(602) 350-4545
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	kevin.williams@phoenix.gov

## Other Points of Contact

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Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	(602) 262-6627
Facility or Parent Company WWW Homepage Address:	www.phoenix.gov

## Local Emergency Planning Committee

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LEPC:	Maricopa County LEPC
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## Full Time Equivalent Employees

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Number of Full Time Employees (FTE) on Site:	68
FTE Claimed as CBI:	

## Covered By

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OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	
Air Operating Permit ID:	

## OSHA Ranking

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OSHA Star or Merit Ranking:

## Last Safety Inspection

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Last Safety Inspection (By an External Agency) Date:	13-Sep-2006
Last Safety Inspection Performed By an External Agency:	State environmental agency

## Predictive Filing

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Did this RMP involve predictive filing?:

## Preparer Information

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Preparer Name:  
Preparer Phone:  
Preparer Street 1:  
Preparer Street 2:  
Preparer City:  
Preparer State:  
Preparer ZIP:  
Preparer ZIP4:  
Preparer Foreign State:  
Preparer Foreign Country:  
Preparer Foreign ZIP:

## Confidential Business Information (CBI)

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CBI Claimed:  
Substantiation Provided:  
Unsanitized RMP Provided:

## Reportable Accidents

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Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.
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## Process Chemicals

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Process ID:	1000007760
Description:	Chlorination System
Process Chemical ID:	1000008683
Program Level:	Program Level 3 process
Chemical Name:	Chlorine
CAS Number:	7782-50-5
Quantity (lbs):	68000
CBI Claimed:	
Flammable/Toxic:	Toxic

## Process NAICS

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Process ID:	1000007760
Process NAICS ID:	1000007906
Program Level:	Program Level 3 process
NAICS Code:	22132
NAICS Description:	Sewage Treatment Facilities

## Section 2. Toxics: Worst Case

Toxic Worst ID: 1000006478

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Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

### Passive Mitigation Considered

Dikes:	
Enclosures:	Yes
Berms:	
Drains:	
Sumps:	
Other Type:	

## Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000007113

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Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

### Passive Mitigation Considered

Dikes:	
Enclosures:	Yes
Berms:	
Drains:	
Sumps:	
Other Type:	

### Active Mitigation Considered

Sprinkler System:	Yes
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	Yes
Flares:	
Scrubbers:	Yes
Emergency Shutdown:	Yes
Other Type:	

## **Section 4. Flammables: Worst Case**

No records found.

## **Section 5. Flammables: Alternative Release**

No records found.



## Section 6. Accident History

No records found.

## Section 7. Program Level 3

### Description

The City takes an active role in preventing accidental releases by ensuring that its employees are properly trained in the safe operation of the covered process and the safe handling of treatment chemical. The City has also established and maintains procedures for emergency notification and response. These are reviewed with employees on a periodic basis and revised to accommodate changes in staffing when they occur. To increase employee safety and awareness, the City:

- Maintains up-to-date safety information and operating procedures,
- Performs regular preventative maintenance,
- Provides periodic refresher training on safe handling of chemicals, and
- Conducts monthly safety drills

### Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000007121
Chemical Name:	Chlorine
Flammable/Toxic:	Toxic
CAS Number:	7782-50-5

Prevention Program Level 3 ID:	1000006199
NAICS Code:	22132

### Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	28-Apr-2009
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### Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	28-Apr-2009
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### The Technique Used

What If:	Yes
Checklist:	
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	30-Nov-2009

### Major Hazards Identified

Toxic Release:	Yes
Fire:	
Explosion:	
Runaway Reaction:	
Polymerization:	

Overpressurization:	
Corrosion:	Yes
Overfilling:	
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	
Earthquake:	
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

## Process Controls in Use

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Vents:	
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	Yes
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	Yes
Backup Pump:	
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	Yes
Excess Flow Device:	Yes
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

## Mitigation Systems in Use

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Sprinkler System:	Yes
Dikes:	
Fire Walls:	Yes
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	Yes
Neutralization:	Yes
None:	
Other Mitigation System in Use:	

## Monitoring/Detection Systems in Use

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Process Area Detectors:	
Perimeter Monitors:	Yes
None:	
Other Monitoring/Detection System in Use:	

## Changes Since Last PHA Update

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Reduction in Chemical Inventory:	Yes
Increase in Chemical Inventory:	
Change Process Parameters:	
Installation of Process Controls:	
Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	
Other Changes Since Last PHA or PHA Update:	

## Review of Operating Procedures

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Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	28-Apr-2009
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## Training

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Training Revision Date (The date of the most recent review or revision of training programs):	28-Apr-2009
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## The Type of Training Provided

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Classroom:	Yes
On the Job:	Yes
Other Training:	

## The Type of Competency Testing Used

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Written Tests:	Yes
Oral Tests:	
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

## Maintenance

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Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	28-Apr-2009
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Equipment Inspection Date (The date of the most recent equipment inspection or test):	28-Apr-2009
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Equipment Tested (Equipment most recently inspected or tested):	Chlorine Leak Detection System
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## Management of Change

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Change Management Date (The date of the most recent change that triggered management of change procedures): 08-Dec-2004

Change Management Revision Date (The date of the most recent review or revision of management of change procedures): 08-Dec-2004

## Pre-Startup Review

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Pre-Startup Review Date (The date of the most recent pre-startup review): 08-Dec-2004

## Compliance Audits

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Compliance Audit Date (The date of the most recent compliance audit): 10-Nov-2008

Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit): 30-Jun-2009

## Incident Investigation

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Incident Investigation Date (The date of the most recent incident investigation (if any)):

Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):

## Employee Participation Plans

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Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans): 28-Apr-2009

## Hot Work Permit Procedures

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Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures): 28-Apr-2009

## Contractor Safety Procedures

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Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures): 28-Apr-2009

Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance): 28-Apr-2009

## Confidential Business Information

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CBI Claimed:

## **Section 8. Program Level 2**

## Section 9. Emergency Response

### Written Emergency Response (ER) Plan

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Community Plan (Is facility included in written community emergency response plan?):

Facility Plan (Does facility have its own written emergency response plan?): Yes

Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?): Yes

Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?): Yes

Healthcare (Does facility's ER plan include information on emergency health care?): Yes

### Emergency Response Review

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Review Date (Date of most recent review or update of facility's ER plan): 08-Jun-2009

### Emergency Response Training

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Training Date (Date of most recent review or update of facility's employees): 01-May-2009

### Local Agency

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Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated): Phoenix Fire Department

Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated): (602) 253-1191

### Subject to

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OSHA Regulations at 29 CFR 1910.38: Yes  
OSHA Regulations at 29 CFR 1910.120: Yes  
Clean Water Regulations at 40 CFR 112: Yes  
RCRA Regulations at CFR 264, 265, and 279.52: Yes  
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254: Yes  
State EPCRA Rules or Laws: Yes  
Other (Specify):

## Executive Summary

### Executive Summary

23rd Avenue Wastewater Treatment Plant (WWTP) is one of the many facilities owned and operated by the City of Phoenix. 23rd Avenue WWTP has prepared a Risk Management Plan (RMP) in accordance with the EPA and OSHA regulatory requirements. A brief overview of the RMP and the associated policies at 23rd Avenue WWTP is described below.

### Prevention and Response Policies

The City takes an active role in preventing accidental releases by ensuring that its employees are properly trained in the safe operation of covered processes and the safe handling of treatment chemicals. The City has also established and maintains procedures for emergency notification and response. These are reviewed with employees on a periodic basis and revised to accommodate changes in staffing when they occur. To increase employee safety and awareness, the City:

- Maintains up-to-date safety information and operating procedures,
- Performs regular preventative maintenance,
- Provides periodic refresher training on safe handling of chemicals, and
- Conducts quarterly safety drills

### Facility Description and Regulated Substances

23rd Avenue WWTP disinfects wastewater from residential and business sources through a series of physical, biological and chemical treatment operations that include grit removal, sedimentation, aeration, clarification, disinfection, and dechlorination.

The regulated substance handled at 23rd Avenue WWTP is chlorine. The chlorine is stored in one-ton cylinders, with a maximum of thirty-five cylinders (70,000 lbs.).

### Prevention Steps for Chlorine

The prevention program fulfills the requirements of the OSHA Process Safety Management (PSM) rule and the EPA RMP rule, and includes:

- Formal and on-the-job training,
- Written operating procedures, and
- A process equipment preventive maintenance program.

The primary means of mitigating an accidental chlorine release at 23rd Avenue WWTP is the installation of a chemical scrubber for the chlorine storage buildings. The scrubber is maintained on a regular basis to ensure proper operation if needed during a chlorine release.

### Accident History

There has been no accidental release of the covered chemical in the past five years.

### Emergency response Program

This facility has established and maintains an emergency response program that is coordinated with local response agencies. The goals of the program are to protect on-site employees from the hazardous effects of the releases and to minimize the effects of releases on the general public. The program is routinely reviewed and updated to reflect personnel and regulatory changes.

### Planned changes for Improved Safety

The facility has converted to the use of one-ton containers which replaces the 17-ton tankers. Ideas for changes to improve safety are actively sought from employees. Employee meetings that focus on safety issues are held regularly at the facility. Employees are encouraged and trained to recognize hazards and present ideas to eliminate them or to minimize the potential consequences of those hazards.

During the resubmission of the RMP document, a process hazard analysis of the chlorine system was conducted with key employees to fulfill the prevention program requirements. During these sessions, recommendations were made for the purpose of improving safety and preventing accidental chemical releases. Each recommendation will be or has been considered for implementation. Though not all recommendations may be implemented, the exercise provided all affected employees with a heightened awareness of safety issues related to the covered processes.